

REMARKS

Reconsideration and withdrawal of the rejections set forth in the Final Office Action dated July 7, 2009, is respectfully requested in view of this amendment. By this amendment, the specification and claims 1 and 8 have been amended. Claims 6 and 11 have been canceled without prejudice or disclaimer to the contents therein. Claims 1-5 and 7-10 are pending in this application.

The amendments to the specification include rewriting "component 1" to read "heat-protected thermoplastic component 1" and rewriting "gage" to read "gauge." Claim 1 has been amended in order to describe each of the plurality of the folding pockets as having a random deformation in comparison to other folding pockets. The specification and claims have been amended to correct typographical errors and otherwise conform the specification, claims and claim terminology to U.S. patent practice and to be consistent with the remainder of the specification and claims. Claims 6 and 11 have been canceled without prejudice or disclaimer to the contents therein, for the sole reason of advancing prosecution. Applicants, by amending any claims and/or canceling any claims, make no admission as to the validity of any rejection made by the Examiner against any of these claims. Applicants reserve the right to reassert any of the claims canceled or the original claim scope of any claim amended, in a continuing application.

Support is found throughout the original application (specification, claims and figures) as filed, *inter alia*, in the paragraph beginning on page 6, line 29, of the original specification as filed. It is respectfully submitted that the above amendments introduce no new matter within the meaning of 35 U.S.C. §132.

In the outstanding Office Action, the Examiner objected to the disclosure due to informalities; claims 6 and 11 were rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement; and claims 1-11 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. Claims 1, 3-5, 8,

and 9 were rejected under 35 U.S.C. §102(b) as being anticipated by Canadian Published Patent Application No. CA 2027116 to Ehrat et al. (hereinafter *Ehrat*); claim 2 was rejected under 35 U.S.C. §103(a) as being unpatentable over *Ehrat* in view of U.S. Patent No. 5,422,150 to Scoular et al. (hereinafter *Scoular*); claims 5, 6, 10, and 11 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Ehrat*; and claim 7 was rejected under 35 U.S.C. §103(a) as being unpatentable over *Ehrat* in view of U.S. Patent No. 5,883,172 to Heucher et al. (hereinafter *Heucher*). These rejections, as applied to the revised claims, are respectfully traversed.

Interview Summary

Applicants thank the Examiner and his Supervisory Patent Examiner for the courtesies extended to Applicants' Representative in the Interview with the Examiner(s) on October 16, 2009. Discussion items included an overview of Applicants' claimed subject matter, and the shape of the folding pockets and relative shape of the folding pockets to one another in view of the previously presented claim features "said unperforated foil comprises a plurality of *folding pockets, which are partially compressed, turned-over or folded* and therefore form unperforated folding pockets," (emphases added) etc., in comparison and differentiation from the asserted "supports(s)" of the cited art of record. Applicant's Representative presented a proposed amended independent claim reciting *inter alia*, "random deformations of folding pockets," to further clarify the discussed differences. The Examiners indicated that they acknowledged the differences between the claimed subject matter, represented by proposed amended independent claim, and the cited references. The Examiners liked the recitation of "random deformations" in the proposed claim, but also suggested that the claim language be further refined to clarify that each "folding pocket" is "random" with respect to another/other "folding pocket(s)." The Examiners agreed that the proposed claim language is supported by the originally filed

specification.

In regard to the rejections under 35 U.S.C. §112, first paragraph, the Examiner indicated that the recited ranges are problematic and suggested cancelation of claims 6 and 11. In regard to the rejection under 35 U.S.C. §112, second paragraph, the Examiner suggested deletion of the term "partially" from the claims.

Accordingly, in view of the Interview and the Examiner(s)' requests, Applicants submit amended claims, as discussed, and a discussion below of the differences between Applicants' claimed subject matter and the cited art of record. *Applicants respectfully request that Applicants' Representatives be contacted should any issues remain unresolved, i.e. preventing the application from allowance.*

Objections to the Specification

The Examiner objected to the specification "because of the following informalities: Page 4, line 34) and elsewhere within the disclosure) the word 'gage' should be rewritten 'gauge.' On page 5, beginning line 24, and elsewhere within the disclosure, the 'component 1' should read as the 'heat-protected thermoplastic component 1' consistently" and required appropriate correction.

Response

As discussed above, the specification has been amended to rewrite "component 1" as "heat-protected thermoplastic component 1" and rewrite "gage" as "gauge." As amended, Applicants respectfully submit the objections have been obviated, and request reconsideration and withdrawal of the objection.

Rejections Under 35 U.S.C. §112, First Paragraph

The Examiner rejected claims 6 and 11 under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement. Specifically, the Examiner asserted that the features of the pockets situated with respect to a radius (claim 6) and a range of 0.01 to 0.05 were unsupported by the specification.

Response

As discussed above, claims 6 and 11 have been canceled without prejudice or disclaimer; accordingly, the rejections thereto are moot. It is therefore requested that the rejections under 35 U.S.C. §112, first paragraph be removed.

Rejections Under 35 U.S.C. §112, Second Paragraph

In the outstanding Office Action, the Examiner rejected claims 1-11 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. In particular, the Examiner cited the recitation of "partially compressed" as indefinite because it is allegedly unclear from the limitations to what extent the folded pockets must be compressed in order to qualify as being partially compressed.

Response

By this Response and Amendment, reconsideration and withdrawal of the rejections are respectfully requested.

For the express purpose of advancing prosecution, as discussed with the Examiner(s) during the Interview, Applicants submit amended claims in which the term "partially" has been deleted from the claims. Hence, Applicants submit that the rejections of claims 1-11 under

35 U.S.C. §112 are overcome. It is therefore respectfully submitted that the rejections under 35 U.S.C. §112 should be withdrawn.

Rejections under 35 U.S.C. §102

Claims 1, 3 5, 8, and 9 were rejected under 35 U.S.C. §102(b) as anticipated by *Ehrat*. *Ehrat* is cited as disclosing a panel with a rigid foam layer and a metallic covering layer, in which pear-shaped beads are formed and embedded in the foam core. This configuration was deemed to inherently provide a mechanical anchoring between the upper covering layer and the foam core. The rejection further alleges that the *Ehrat* reference provides a heat-protected thermoplastic component.

Response

This rejection is traversed as follows. For a reference to anticipate an invention, all of the elements of that invention must be present in the reference. The test for anticipation under section 102 is whether each and every element as set forth in the claim is found, either expressly or inherently, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987); MPEP §2131. The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989); MPEP §2131.

The present claims, as amended, describe a foil structure in which the foil forms folding pockets, which are compressed, which are embedded in the carrier layer such that a mechanical anchoring is obtained between said folding pockets and the carrier layer, each of the plurality of the folding pockets having random deformations. With reference to Applicants' Fig. 2, the folds are caused to have deformations to form a compressed, crushed or randomly folded structure of the unperforated metallic foil. The deformations cause the structure resulting from application of

the synthetic material to incorporate the deformations.

In this regard, claim 1 recites:

" ... said unperforated metallic foil comprises a plurality of folding pockets, which are compressed unperforated folding pockets, which are embedded in the carrier layer such that a mechanical anchoring is obtained between said folding pockets and the carrier layer, each of the plurality of the folding pockets having a random deformation in comparison to any other of each of the plurality of the folding pockets."

Ehrat describes a three dimensional structure but fails to suggest the compressed (unperforated) folded pockets or other folding pockets which are embedded in the carrier layer such that a mechanical anchoring is obtained, each of the folding pockets having a random deformation in comparison to any other of each of the plurality of the folding pockets. Instead, *Ehrat* describes that a foam block is first produced with the beads, and then the foil is adhered to the surface, by means of an adhesive, *without* any deterioration of the foil or *embedding* of the foil within the foam to form a "mechanical anchoring"; instead the *Ehrat* beads merely extend into the plastic material in such a way as to permit deformation of the plastic by permitting movement of the composite structure about the beads. In order to accomplish this, the *Ehrat* beads must extend in a different manner than that presently claimed, and as a result do not form firm mechanical anchors or internal folding pockets having random deformation in comparison to any other of each of the plurality of the folding pockets. Indeed, *Ehrat* describes that "[t]he *geometrical* cross-sectional shape of the beads is *designed* in such a way." See page 2, lines 1-2, emphases added. Such geometrical designed shapes further reinforce that *Ehrat* fails to teach, show or suggest "folding pockets having a *random* deformation *in comparison to any other of each of the plurality of the folding pockets*" or random shapes as claimed.

Applicants therefore respectfully submit that the *Ehrat* reference does not teach or suggest all the features as recited in claims 1, 3 5, 8, and 9 of the present application. It is therefore respectfully submitted that the rejection under 35 U.S.C. §102 should be withdrawn.

Rejections Under 35 U.S.C. §103

The Examiner rejected claim 2 under 35 U.S.C. §103(a) as being unpatentable over *Ehrat* in view of *Scoular*. Claims 5, 6, 10, and 11 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Ehrat*, adjusted for thickness and spacing. Claim 7 was rejected under 35 U.S.C. §103(a) as being unpatentable over *Ehrat* in view of *Heucher*.

Response

These rejections, as applied to the amended claims, are respectfully traversed. To establish a *prima facie* case of obviousness, the Examiner must establish: (1) some suggestion or motivation to modify the references exists; (2) a reasonable expectation of success; and (3) the prior art references teach or suggest all of the claim limitations. *Amgen, Inc. v. Chugai Pharm. Co.*, 18 USPQ2d 1016, 1023 (Fed. Cir. 1991); *In re Fine*, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988); *In re Wilson*, 165 USPQ 494, 496 (CCPA 1970). A *prima facie* case of obviousness must also include a showing of the reasons why it would be obvious to modify the references to produce the present invention. See *Dystar Textilfarben GMBH v. C. H. Patrick*, 464 F.3d 1356 (Fed. Cir. 2006). The Examiner bears the initial burden to provide some convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings. *Id.* at 1366.

To show obviousness under §103, it is necessary to show an incentive to benefit from the change. *KSR International Co. v. Teleflex Inc. et al.*, 127 S.Ct. 1727, 82 USPQ2d 1385 (2007).

"The proper question to have asked was whether a pedal designer of ordinary skill, facing the wide range of needs created by developments in the field of endeavor, would have seen a benefit to upgrading Asano with a sensor. In automotive design, as in many other fields, the interaction of multiple components means that changing one component often requires the others to be modified as well." (*id* at 127 S.Ct. 1744)

A demonstration of obviousness under §103 requires that the combination represent a design step well within the grasp of a person of ordinary skill in the relevant art. *id*.

"KSR provided convincing evidence that mounting a modular sensor on a fixed pivot point of the Asano pedal was a design step well within the grasp of a person of ordinary skill in the relevant art. (*id* at 127 S.Ct. 1746)

As described above, *Ehrat* fails to suggest particular claimed features relevant to the components used to construct folding pockets, which are compressed and which are embedded in the carrier layer such that a mechanical anchoring is obtained, each of the folding pockets having random deformation in comparison to any other of each of the plurality of the folding pockets. Accordingly, it is respectfully submitted that the remaining references are similarly deficient and fail to suggest incorporating these features and therefore also fail to suggest Applicants' claimed structure. Instead, the rejections under 35 U.S.C. §103(a) allege that it would have been obvious to use the materials to produce Applicants' structure, but without describing Applicants' structure in the first place. *Scoular* is used to show particular structures of long fiber reinforced thermoplastic. *Heucher* is cited as teaching a polyamide hotmelt adhesive useful for bonding metals (aluminum-containing metals) to plastic. Thus, the prior art references fail to teach or suggest all of the claim limitations, as required by *In re Wilson*, inasmuch the prior art references

fail to teach or suggest at least “a plurality of folding pockets, which are compressed unperforated folding pockets, which are embedded in the carrier layer such that a mechanical anchoring is obtained between said folding pockets and the carrier layer, each of the folding pockets having a random deformation in comparison to any other of each of the plurality of the folding pockets,” as presently claimed.

Claims 2, 5, 6, 7, 10 and 11 depend or indirectly from claim 1. *Scoular* and *Heucher* fail to cure the deficiencies of *Ehrat* noted above with regard to claim 1. *Scoular* and *Heucher* were cited by the Examiner in an attempt to teach the additional features of dependent claims 2, 5, 6, 7, 10 and 11. Even if a person having ordinary skill in the art happens to combine *Ehrat*, *Scoular* and *Heucher*, the combined references still do not teach at least “a plurality of folding pockets, which are compressed unperforated folding pockets, which are embedded in the carrier layer such that a mechanical anchoring is obtained between said folding pockets and the carrier layer, each of the folding pockets having a random deformation in comparison to any other of each of the plurality of the folding pockets,” as recited in claim 1. Hence, claims 2, 5, 6, 7, 10 and 11 are allowable at least because they depend from allowable claim 1.

It is therefore respectfully submitted that the rejection under 35 U.S.C. §103(a) should be withdrawn and the case be passed to issuance.

CONCLUSION

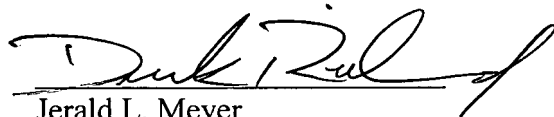
In light of the foregoing, Applicants submit that the application is in condition for allowance. If the Examiner believes the application is not in condition for allowance, Applicants respectfully request that the Examiner call the undersigned.

Respectfully submitted,

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